# Patients who do not receive continuity of care from their general practitioner — are they a vulnerable group?

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#### SUMMARY

**Background.** Continuity of care is much valued by general practitioners but little is known about those patients who do not receive continuity of care.

**Aim.** This study set out to identify and describe a group of patients who did not receive continuity of care from the general practitioner with whom they were personally registered.

Method. A total of 110 patients (71 female and 39 male) were identified, who did not receive continuity of care, defined as four consecutive face to face consultations which did not take place with the doctor with whom they were registered. This group was compared with an age and sex matched control group who did receive continuity of care, using general practice records, for demographic characteristics, morbidity, relationship problems, number of 'difficult' consultations, failure to attend appointments, and use of an accident and emergency department and of open access clinics.

Results. Patients in the study group were more likely to be under the age of 65 years than all patients on the doctor's list. Study patients were more likely than control patients to be in social class 4 or 5 living in a council house. Patients in the study group were more likely than controls to be depressed. Women patients in the study group were more likely to suffer from vaginal discharge. Men patients in the study group were more likely to complain of non-cardiac chest pain. The study group had more marital problems, parent-child relationship problems, and problems involving violence in the family, as well as other relationship problems. Relationship problems included the relationship with the doctor, since a third of all the consultations in the study group were recorded as 'difficult', compared with 3% in the control group. The study group patients were more likely than controls not to attend appointments which they had made, to use the accident and emergency department repeatedly, and to have used other open access clinics.

**Conclusion.** Lack of continuity of care is associated with some additional morbidity, an increased number of relationship problems, 'difficult' consultations, and non-attendances, and an increase in the use of open access clinics. The characteristics of this group of patients represent a syndrome which merits further study.

Keywords: continuity of patient care; consultation patterns; doctor patient relationship; socioeconomic factors; personal list.

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Submitted: 30 March 1994; accepted: 9 August 1994.

© British Journal of General Practice, 1995, 45, 133-135.

#### Introduction

ONTINUITY of care is much valued by general practitioners and the feature of continuity is included in all the principal descriptions of the general practitioner, such as that of the Royal College of General Practitioners<sup>1</sup> and the Leeuwenhorst working party.<sup>2</sup> Although several different definitions of continuity exist,2-5 as a concept it is seen as desirable by doctors and patients, 6,7 and is thought to improve compliance and patient satisfaction.<sup>8,9</sup> Wright has argued that knowledge of a patient's lifestyle, correctly interpreted, could assist in the assessment of a developing illness. 10 However, relatively little is known about those who do not receive continuity of care. Fairley looked at patients who usually consulted the trainee in general practice, and noted that they shared some characteristics with patients who did not usually consult the same principal, but he did not describe his group in detail. 11 Kaplan and colleagues, reviewing the literature on the effects of physician-patient interaction on the outcomes of chronic disease, concluded that the doctor-patient relationship may be an important influence on patients' health outcomes. 12

Clinical experience in a practice which adopted personal lists in 1973<sup>13</sup> suggested that patients who do not receive continuity of care would be younger than those receiving continuity, female, and may have relationship problems. It was hypothesized that there might be difficulties in the doctor's relationship with such patients, and that one consequence of this might be an increase in the patients' use of alternative primary care services, and a reduction in the quality of care provided for such patients.

The aim of this study was to identify and describe a group of patients who did not receive continuity of care from the general practitioner with whom they were personally registered.

# Method

During 1988–90, the records of the patients personally registered with one general practitioner (D G) were examined to identify those patients who had repeatedly not seen the doctor with whom they were registered. The study practice was located in the centre of a county town in the south west of England, had four doctors operating a personal list system, <sup>13</sup> and was situated about half a mile from the district general hospital, which had an accident and emergency unit.

The study group were defined as those patients who had, on four consecutive occasions at any period of time, seen a general practitioner other than the general practitioner with whom they were registered. These other general practitioners could be any other partner, the trainee, or a locum.

The term registration is used specifically to indicate the general practitioner principal with whom the patient is registered under the National Health Service. The practice operates a personal list system, in which patients normally see, and are encouraged to see their own doctor. The organization of the practice is such that if a patient begins to consult regularly with another partner, that patient would be invited formally, using form FPI, to re-register with that doctor, and the record would be moved and filed with the new partner's records. No private patients were included in the study.

For every study patient a patient from the same doctor's list who did not fulfil the study criterion was identified, matched for age and sex. The records of the patients in the study and control groups were examined by K S. Information was abstracted about demographic characteristics, major diseases, relationship problems and police involvement with the family. Social class (Registrar General's classification) was readily available as it was practice policy that it should be marked on every record systematically. The state of preventive care was noted for each patient. The preventive status of the patient was used as a proxy measure of quality of care: the measures of quality of care used included rates of cervical smears, rubella status, and a record of contraceptive advice for women patients, and smoking rates for both sexes. The use of open access services, for example, the hospital accident and emergency department, family planning clinics, and other open access primary care clinics was also noted. As part of practice policy relationship problems were recorded diagrammatically in every record using a Zander chart, 14 and every letter from the hospital or any open access clinic was retained in the notes as this was also practice policy.

The records were then examined for so called 'difficult' consultations. A 'difficult' consultation was defined as a consultation in which: a doctor had actually written 'difficult consultation'; from the notes it was clear the patient or doctor was angry or dissatisfied; or the doctor had registered dissatisfaction, for example by recording 'prescription issued reluctantly'.

Finally, the number of non-attendances was counted. The practice had a policy agreed among all doctors to record such non-attendances systematically.

Statistical analysis was based on chi square calculations, which in every case were Yates corrected. The P values are based on these corrected chi square values.

#### Results

The study group comprised 110 patients (71 female and 39 male patients), identified from a list of 1793 patients (6.1%) (Table 1). These were exactly matched by calender year of birth, and by sex with the control group. Although there were almost twice as many female as male patients in the study group, this numerical difference failed to reach statistical significance.

The study group members were more likely to be under the age of 65 years than all patients on the doctor's list (P<0.001), and were more likely than the control group to be in social class 4 or 5 living in a council house (Table 2). Significantly more of the study group than control group had depression recorded in their notes, vaginal discharge was recorded more commonly for study group women and non-cardiac chest pain more commonly for study group men. Relationship problems were significantly more likely to be recorded in the records of the study group

Table 1. Age and sex distribution of general practitioner's list and the study group.

Age (years)	Number of patients					
	Total list			Study group		
	Male	Female	Total	Male	Female	Total
0-4	59	78	137	2	2	4
5-15	71	65	136	3	8	11
16-29	258	310	568	10	34	44
30-44	177	195	372	11	9	20
45-64	112	190	302	13	15	28
65+	67	211	278	0	3	3
Total	744	1049	1793	39	71	110

Table 2. Characteristics of the 110 study and 110 control patients (39 male and 71 female patients) for which significant differences were found.

	Number of patients		
	Study group	Control group	
Social class 4 or 5 living in a council			
house	76	44***	
Depression diagnosed	18	5**	
Vaginal discharge in women	31	12**	
Non-cardiac chest pain in men	6	0*	
Marital problems recorded	25	3***	
Violence in household recorded	10	1*	
Parent-child relationship problems	26	5***	
Other relationship problems	22	7**	
'Difficult' consultation ever recorded	37	3***	
Failure to attend surgery appointments	42	19***	
Attended accident and emergency department 3+ times	13	2**	
Attended family planning clinics	9	0**	
Attended other open access clinics	10	0**	

<sup>\*</sup>P<0.05; \*\*P<0.01; \*\*\*P<0.001.

patients than the control group. These included marital problems, violence in the household, parent-child relationship problems, and other relationship problems.

'Difficult' consultations were significantly more likely to have been recorded in the study group than the control group (Table 2). One third of the study group patients had this recorded in their notes (33.6%), compared with 2.7% of the controls. Patients in the study group were more likely not to attend appointments which they had made than the control group patients.

The study group patients were significantly more likely than the control group to have used the accident and emergency department three or more times (Table 2). They were also significantly more likely to have used family planning clinics or other open access clinics. These open access clinics included women's welfare clinics, clinics run by community psychiatric nurses, anxiety/depression clinics, alcohol abuse clinics, or free health check clinics set up in shopping centres.

#### Discussion

Little is known about the characteristics of those patients who do not receive continuity of care in general practice partly because the majority of practices are organized on a combined list system, where patients have a free choice of doctor, and may move between partners. 15 It is possible only in practices which operate a personal list system to carry out a study of patients who repeatedly do not see the doctor with whom they are registered. After adopting personal lists, this practice was able to measure the amount of personal care provided by each partner. Personal care was calculated as the percentage of all the patients on the doctor's list who attended the surgery during a unit of time, for example a year, who saw the doctor with whom they were personally registered. For the study doctor (D G), the percentage of personal care varied between 55% and 65% in the years 1973 to 1988. The figure calculated in this study is lower than some published estimates of personal care.16

Patients in the study group were more likely to be younger than all the patients on the doctor's list, and more likely to be in lower social classes living in a council house than the controls. This may be another example of Tudor Hart's inverse care law, that there is a differential lack of access to the resource of a personal doctor by the most underprivileged.<sup>17</sup>

The study group patients experienced significantly more relationship problems than the control group. In addition to the significant differences recorded, there were non-significant differences in the recording of police involvement with the family, and relationship problems at work which merit further study.

Study patients did not attend appointments they had made significantly more often than control patients. This could be interpreted as evidence of another relationship problem, with the practice or the personal doctor.

'Difficult' consultations were recorded in writing for one third of the study group patients, compared with 3% of the controls. As it is recorded in the patients' notes, this suggests that the doctor was experiencing some difficulty in the relationship with the patient. It is also compatible with the reverse, namely that the study group patients had a difficult relationship with their doctor.

Depression, vaginal discharge in women, and non-cardiac chest pain in men, occurred more frequently in the study group than in the control group. It may be possible to interpret these findings as clinical manifestations of interpersonal problems.

A number of identified open access clinics were used more frequently by the study group patients than by controls. There are two implications from this finding. First, attendance at these clinics may be more expensive to the NHS, and ultimately to the tax payer, than attendance at a general practice consultation. Secondly, it could be interpreted as a conscious or subconscious avoidance by the patients of their own doctor. The result also confirms Virji's finding that open access attendance was linked to marital disharmony and lack of social support. 18

No significant differences were found in the quality of preventive care received by the study and control groups of patients. One explanation for this could be that, although the personal doctor saw the study group patients less often, the doctor was still able to update the preventive status adequately. For example, all the cervical smears in both study and control groups were carried out by the registered doctor personally.

It could be argued that, because of the implicit dysfunctional nature of the relationship between the doctor and some of the patients in the study group, there may be a bias in the recording or extraction of information. However, the information extracted was factual material, contained in hospital records, recorded explicitly on the Zander chart, or defined by explicit definitions in the study design. No systematic bias in the recording was identified which could have led to the differences reported. If any source of bias did exist, it would be equally dispersed between the study and control groups.

It is obviously possible for patients to have four consecutive consultations with doctors other than then their own if, for example the personal doctor is away on holiday. Secondly, a trainee may follow a particular patient up for four or more consecutive consultations, although the study doctor was not the practice's designated trainer at the time of this study. Thirdly, the partner concerned has substantial commitments outside the practice, further reducing his availability and the possibility for continuity of care. However, all these factors would tend to minimize any difference between the study and control groups, and the fact that significant differences were found tends to support the suggestion that the study patients form a discrete group, with characteristic features.

One interpretation of the study findings is that a group of patients demonstrate a syndrome which inhibits them from forming satisfactory personal relationships and results in increased morbidity from certain common conditions. They are more likely to have unsatisfactory interpersonal relationships, and to be depressed. They also do not enjoy a satisfactory relationship with their own general practitioner who records his or her difficulty in the relationship accordingly. Non-attendance at appointments in the surgery, and the use of open access clinics may be indirect statements of the dysfunctional doctor-patient relationship. These patients may constitute a vulnerable group requiring extra care in consultations, and meriting further study.

This is a single doctor study, and it cannot be assumed that either the doctor or the patients involved are representative of the general population. However, this would appear to be the first report of these features in patients who do not receive continuity of care for whatever reason. It is to be hoped that the study will be replicated in bigger groups and that is will stimulate further research into one of the most important characteristics of British general practice.

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# Acknowledgements

The authors thank the Clare Wand Fund, which provided the funding for this study, and Dr Kenneth Read for his statistical advice. The data analysis was carried out by K S while in tenure of a 1991 Harkness fellow-

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# Food for thought...

'Parents managed 67% to 99% of infants' health problems without requiring a consultation. Parents often delayed four or five days before consulting their doctor for symptoms in conditions which could be judged to be "normal" for the child such as respiratory symptoms.'

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